

mAb 5B12.3INVESTIGATOR

Name John Cooper
Address Department of Cell Biology & Physiology, Washington University Medical School,
660 S. Euclid, St. Louis, MO 63110
Phone (314) 362-3964

IMMUNOGENSubstance

Name GST-capping protein- α 1-subunit from chicken
Origin expressed in E. Coli
Chemical Composition protein

Developmental StageIMMUNIZATION PROTOCOLDonor Animal

Species mouse
Strain Balb/C
Sex female
Organ and tissue

Immunization

Dates immunized 4/92
Amount of antigen
Route of immunization subcutaneous
Adjuvant Freund's complete

FUSION

Date 6/92

Myeloma cell line

Species mouse
Designation P3x63 Ag8.653

MONOCLONAL ANTIBODY

Isotype IgG2a, kappa light chain -can be purified on protein A

Specificity

Cell binding no
Immunohistology yes
Antibody competition
Species Specificity chicken, mouse, human

ANTIGEN

Chemical properties protein-antibody reacts with capping protein α 1 and α 2 subunits

Molecular weight ~34 kDa

Characterization

Immunoprecipitation yes
Immunoblotting yes
Purification
Amino acid sequence analysis

Functional effects

Immunohistochemistry yes

PUBLICATIONS :

Schafer, D.A., Jennings, P.B., and Cooper, J.A. (1996). Dynamics of capping protein and actin assembly in vitro: uncapping barbed ends by polyphosphoinositides. J. Cell Biol. 135(1), 169-179.

mAb 3F2.3

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IMMUNOGEN

Substance

Name GST-C-term of $\beta 2$ -subunit-fusion protein of GST with 27 amino acids at the C-terminus of
chicken capping protein $\beta 2$ -subunit
Origin expressed in E. Coli

Chemical Composition protein

Developmental Stage all

IMMUNIZATION PROTOCOL

Donor Animal

Species mouse

Strain Balb/C

Sex female

Organ and tissue

Immunization

Dates immunized 8/93

Amount of antigen

Route of immunization subcutaneous

Adjuvant Freund's complete

FUSION

Date 10/93

Myeloma cell line

Species mouse

Designation P3x63 Ag8.653

MONOCLONAL ANTIBODY

Isotype best guess IgG - can be purified on protein A

Specificity

Cell binding no

Immunohistology cell-cell junctions, cytosol

Antibody competition

Species Specificity chicken, mouse, human have been tested

ANTIGEN

Chemical properties

Molecular weight reacts with capping protein - $\beta 2$ -subunit

Characterization

Immunoprecipitation yes

Immunoblotting yes

Purification

Amino acid sequence analysis

Functional effects

Immunohistochemistry yes

PUBLICATIONS :

Schafer, D.A., Jennings, P.B., and Cooper, J.A. (1996). Dynamics of capping protein and actin assembly in vitro: uncapping barbed ends by polyphosphoinositides. J. Cell Biol. 135(1), 169-179.

mAb 1E5.25.4

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IMMUNOGEN

Substance

Name capping protein - β -1
Origin chicken skeletal muscle
Chemical Composition pure protein
Developmental Stage all

IMMUNIZATION PROTOCOL

Donor Animal

Species mouse
Strain P3x63 Ag8.653
Sex female
Organ and tissue

Immunization

Dates immunized 11/87
Amount of antigen
Route of immunization subcutaneous
Adjuvant Freund's complete

FUSION

Date 2/88
Myeloma cell line
Species mouse
Designation P3x63 Ag8.653

MONOCLONAL ANTIBODY

Isotype IgG
Specificity
Cell binding no
Immunohistology yes
Antibody competition
Species Specificity chicken

ANTIGEN

Chemical properties chicken capping protein β 1-subunit
Molecular weight
Characterization
Immunoprecipitation yes
Immunoblotting yes
Purification
Amino acid sequence analysis
Functional effects
Immunohistochemistry antigen located at Z-disks of skeletal muscle

PUBLICATIONS :

Hung, C., Miller, T.M., Torres, M.A., Casella, J.F., and Cooper, J.A. (1992). Identification and characterization of an actin-binding site of CapZ. J. Cell Biol. 116(4), 923-931.